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RESULTS OF THE ARCHBOLD EXPEDITIONS. NO. 18

TWO NEW MURIDAE FROM THE WESTERN DIVISION OF PAPUA

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Among the 1500 mammals obtained by the 1936 Expedition to western Papua the two species described below were recognized in the field as outstandingly different from any species described in New Guinea hitherto. The *Conilurus* represents an extension of a Torresian species-group into Papua; the *Leptomys* is a lowland member of a Papuan genus of Hydromyinae, previously unrecorded below 1000 feet. *Conilurus* is a denizen of the Ti-tree plains, *Leptomys* of well-drained forests bordering the north banks of the Fly River, 150 miles from its mouth.

Conilurus randi, new species

Type.—No. 105636, Amer. Mus. Nat. Hist.; ♀, old adult; Penzara, between Wassi Kussa and Morehead River, Western Division, Papua; alt. 20 meters; Dec. 16, 1936; collector, A. L. Rand, 1936 New Guinea Expedition. The type is a skin with terminal portion of tail missing, skull in good condition.

General Characters.—A member of that group of *Conilurus* to which *penicillatus, hemileucurus* and *melibeus* belong; not closely related to *C. albipes* of the southern part of Australia.

Description.—General color dorsally light grayish brown,[1] finely lined with fuscous; sides pale gray; underparts white, self-colored. The brown of the crown and rump slightly accentuated. Face and limbs gray; ears and tail grayish fuscous; tail becoming increasingly darker distally; hands and feet dull white. Eyes large; feet elongate; mammae 0–2 = 4; vibrissae attaining at most 60 mm.

Skull with the characters of the genus: strongly arched profile; broad zygomatic plate; sharp supraorbital edges; enlarged lacrimals; elongate palatal foramina; broad molar teeth; and deep mandible with greatly reduced coronary process.

Conilurus randi together with the previously known northern races differs from the southern *C. albipes* in possessing normal-sized instead of very large ears; a thinly-haired instead of densely woolly-haired tail; narrow palatal foramina; wide zygomatic plate; lack of thickening of maxillary root of zygoma; unwidened mastoid region.

From its nearest allies of northern Australia it is distinguished by its greater size; much broader and deeper muzzle and broader nasals; much

[1] Colors are those of Ridgway, 1912, 'Color Standards and Nomenclature,' only if capitalized.

longer and broader anterior palatal foramina; much broader mesopterygoid fossa; longer audital bulla; and larger molars.

MEASUREMENTS[1] OF TYPE.—Head and body, 193 mm.; tail (incomplete), 171; hind foot (s.u.) 48, (c.u.) 51; ear from crown, 22. Skull: greatest length, 47.2; condylo-incisive length, 43.9; basal length, 41.0; zygomatic width, 24.4; interorbital width, 6.8; width of braincase, 18.1; mastoid width, 14.8; nasals, 17.8 × 5.7; depth of muzzle behind incisors, 9.5; width of muzzle, 7.5; diastema, 12.6; palatal length 25.4; anterior palatal foramina, 11.1 × 3.2; width of mesopterygoid fossa, 3.6; length of bulla, 7.3; length of crowns of m^{1-3}, 9.0; width of m^1, 3.1.

Conilurus randi is of special interest not only as a new species but also because it marks the first record of a hitherto characteristically Australian genus in southern New Guinea.

We take pleasure in naming the new species for Dr. A. L. Rand who had charge of the field work of the 1936 Expedition to Papua.

Leptomys signatus, new species

TYPE.—No. 105792, Amer. Mus. Nat. Hist.; ♀, ad.; Sturt Island Camp, Fly River (n. bank), near Fairfax Islands, Western Division, Papua; sea level; October 12, 1936; collector, G. H. H. Tate, 1936 New Guinea Expedition. The type is a skin with skull, in good condition.

GENERAL CHARACTERS.—A grayish-brown *Leptomys* with large white frontal patch on each of the four specimens secured. Size rather smaller than *L. elegans* or *L. ernstmayri*.

DESCRIPTION OF TYPE.—Dorsal color nearest Verona Brown, with slightly darker shade above the middle of the back; underparts dull white, self-colored, reaching the wrists and ankles; hands and feet white; a large white area on frons, 13 mm. in length × 7.5 mm. in width. Ears fuscous; tail fuscous above, paler beneath, with white mottlings on distal half.

Pelage short (6 mm. on back; in *L. ernstmayri* it may reach 8 mm.); width of hind foot at base of fifth metatarsal 4.7 mm.; tail scales 14 per cm.; scale hairs 3 per scale, the hairs approximately one scale-length; mammae 0–2 = 4.

Skull slender, with large braincase and almost no flare of the squamosal root of the zygoma. Practically indistinguishable from that of A. M. No. 104199 and A. M. No. 104200 from Mafulu, which show no trace of the white brow area and were earlier referred to *L. ernstmayri*. Teeth of *signatus* much larger than those of the type of *ernstmayri* which was studied a few months ago. From *L. elegans* (also studied) the present species distinguishable by its frontal mark, much smaller size and larger teeth.

MEASUREMENTS.—Head and body (in the flesh), 144 mm.; tail, 151; hind foot (s.u.) 38; ear from crown, 19. Skull: greatest length, 38.4; condylo-basal length, 36.0; basal length, 32.9; zygomatic breadth, 16.2; interorbital breadth, 6.2; interparietal, 9.7; width of braincase, 14.7; width across mastoid, 13.5; palatal length, 20.0; palatal foramina, 4.8 × 2.4; length bulla, 4.8; length crowns m^{1-3}, 6.3; crown of m^1, 3.5 × 1.7; length mandible, 20.4.

This striking new form of *Leptomys* is represented by four specimens, all females and all from the same locality.

[1] Skin measurements taken in the field.